

FIG. 1.

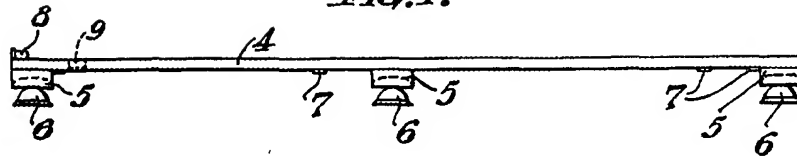


FIG. 2.

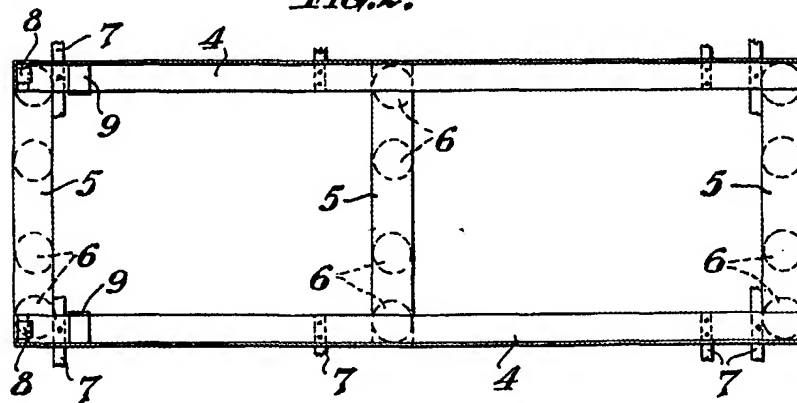
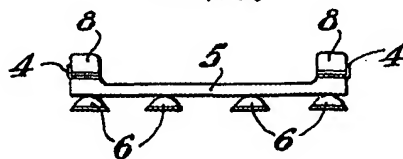


FIG. 3.



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COMPLETE SPECIFICATION.

Improvements relating to the Supporting of Stretchers.

I, HENRY THOMAS FERRIER, a British Subject, of 12 Grosvenor Crescent, London, S.W.1, do hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement :—

The present invention concerns the supporting of stretchers and the like. The main object of the invention is to provide a means which will enable a stretcher to be carried within the body of a van or truck, whereby an "ambulance" can be obtained quickly, especially at meetings such as sporting events, etc., where it is not usual to provide a waiting ambulance service. Thus, the invention seeks to provide a means whereby an ordinary van, lorry or other vehicle having a body with a clear space and floor can be used as an ambulance, the means being arranged so that the stretcher is held in place without screw or like fixtures to the bodywork, and, moreover, so that a reasonable degree of comfort is provided for a casualty on a stretcher carried in the vehicle.

According to this invention the support comprises a frame constructed to receive and hold one or more stretchers thereon, and having on its underside a plurality of surface bearing members, said members being such that a grip is provided directly on said surface against displacement of the support parallel with the surface, and also being resilient to serve to absorb shock.

The invention also consists of a stretcher support for use in a vehicle comprising a frame constructed to receive and hold one or more stretchers thereon and having on its underside a number of resilient sucker cups for gripping the floor surface.

The support also could be such that it can hold more than one stretcher. For example, a framework could be constructed comprising a horizontal base frame for the support of a

stretcher, and, as above described, said frame having uprights, conveniently of angle iron, to support an upper horizontal frame, whereby two stretchers can be supported if necessary, the one above the other. Additional means, such as straps, may be provided for anchoring the support to the van body and to maintain stability.

Conveniently, the stretcher-carrying frame (or frames) consists of longitudinal members on which the stretcher runners are received and secured if necessary and transverse members which maintain the longitudinal members in spaced relation. The frame (or the lower one if two are provided) carries a plurality of rubber cup-like members for bearing on the vehicle body floor, these being secured to the transverse spacing members, of which at least two are provided, one at or near each end of the frame.

It is preferred to provide a support for a single stretcher consisting of longitudinal members and transverse battens with sucker cups on their underside.

A preferred construction will now be described with reference to the accompanying drawings, in which :—

Figure 1 is a side view of the support ;

Figure 2 a plan view ; and

Figure 3 an end view.

The support as shown is for a single stretcher and has two longitudinal members 4, 4, these being of angle section metal. Channel section could be used. The spacing apart and dimensioning is such that the horizontal webs of the members will support the feet or other parts of all normal stretchers.

The members 4, 4, are secured to spaced-apart transverse battens 5, preferably three, one at each end and one centrally. The underside of each batten 5 has a number of sucker cups 6, for example, four, thereacross and equally spaced. The support can be placed into the body of a small van, such as

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a tradesman's van, if the body length is sufficient, of course, and the cups bear on the floor. It is found that if the floor is smooth these will adhere by suction, but even if such

adherence is not obtained, the friction is sufficient to prevent movement of the support under normal conditions, including transport over rough ground.

Means are provided for securing a stretcher on the support. Thus, straps 7 may be used to hold a stretcher by passing around its side runners or supports. A stretcher also could be secured by chained pins, snap locks or the like, and hinged eye plates, locks, channel recesses or the like may be provided to suit special known forms of stretchers and result in easy locking. The support can be made as universal in its application to known forms of stretchers, so that after the support has been placed in position any available

stretcher can be slidden along the longitudinal members from the open rear doors and then secured.

The support can be used in army lorries and standard ambulances in emergency.

Suitable stop members are provided at one end whereby the support can be loaded by sliding a stretcher along from the other end to abut the stop member and then be secured.

These members may be arranged so that the distance of sliding can be varied to suit different forms of stretchers. For example, rubber buffers 8 may be provided, and additionally hinged stops, 9, these latter being swung out of the way when not required. The two forms of stops are provided to take care of the two broad forms of stretchers in use, viz., the type having feet widely spaced at each side along the stretcher poles so that there is only a short handle overhang at each end, as generally used by the armed forces, and the type having the feet closer together so that there is a long handle overhang at each end as in general use.

When using the first type of stretcher, the hinged flaps are left in the open position so that the stretcher is allowed to slide through to the rubber buffers. With the second type, the long overhang of handle beyond the support might foul the bulkhead or other part of the vehicle, and the handles at the other end would fall short of the straps. In such case, the stretcher is located accurately by placing the hinged flaps to reside across

the members 4 to stop said stretcher short of full entry and keep it in a central position on said support.

What I claim is :—

1. A stretcher support comprising a frame constructed to receive and hold one or more stretchers thereon, and having on its underside a plurality of surface bearing members, said members being such that a grip is provided directly on said surface against displacement of the support parallel with the surface, and also being resilient to serve to absorb shock.

2. A stretcher support for use in a vehicle comprising a frame constructed to receive and hold one or more stretchers thereon, and having on its underside a number of resilient sucker cups for gripping the floor surface.

3. A stretcher support as claimed in Claim 2, and for the supporting of a single stretcher comprising a frame consisting of a pair of parallel longitudinal members spaced apart and maintained by transverse members, some or all of which have sucker cups on their underside.

4. A stretcher support as claimed in Claim 3, wherein the longitudinal members consist of channel or angle-section members, and at least two transverse members are provided, one at or near each end.

5. A stretcher support as claimed in any of the preceding claims, wherein stop members are provided at one end whereby the support can be loaded by sliding a stretcher along from the other end to abut the stop member and then be secured in position.

6. A stretcher support as claimed in Claim 5, wherein the stop members are arranged so that the distance of sliding can be varied to suit different types of stretcher.

7. A stretcher support as claimed in any of the preceding claims, wherein straps or like members are provided on the frame for securing a stretcher thereto.

8. A stretcher support constructed substantially as herein described and illustrated in the accompanying drawing.

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by

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PROVISIONAL SPECIFICATION.

Improvements relating to the Supporting of Stretchers.

I, HENRY THOMAS FERRIER, a British Subject, of 12 Grosvenor Crescent, London, S.W.1, do hereby declare this invention to be described in the following statement :—

The present invention concerns the supporting of stretchers and the like. The main object of the invention is to provide a means which will enable a stretcher to be carried

within the body of a van or truck, whereby an "ambulance" can be obtained quickly, especially at meetings such as sporting events, etc., where it is not usual to provide
 5 a waiting ambulance service. Thus, the invention seeks to provide a means whereby an ordinary van, lorry or other vehicle having a body with a clear space and floor can be used as an ambulance, the means being
 10 arranged so that the stretcher is held in place without screw or like fixtures to the body-work, and moreover, so that a reasonable degree of comfort is provided for a casualty on a stretcher carried in the vehicle.

15 Broadly, according to this invention, there is provided a stretcher support comprising a framework constructed to receive and hold the stretcher thereon, and having on its underside a plurality of surface bearing
 20 members of a form such that a grip is provided against displacement across the surface (e.g., the floor of a van body), said members also being resilient to serve to some extent at least to absorb shock due to movement of
 25 the vehicle.

The support also could be such that it can hold more than one stretcher. For example, a framework could be constructed comprising a horizontal base frame for the support of a
 30 stretcher and as above described said frame having uprights conveniently of angle iron, to support an upper horizontal frame, whereby two stretchers can be supported if necessary, the one above the other. Additional
 35 means, such as straps may be provided for anchoring the support to the van body and to maintain stability.

Conveniently, the stretcher carrying frame (or frames) consists of longitudinal members
 40 on which the stretcher runners are received and secured if necessary. The frame (or the lower one if two are provided) carries a plurality of rubber cup-like members for bearing on the vehicle body floor, these being
 45 secured to transverse spacing members.

It is preferred to provide a support for a single stretcher, consisting of longitudinal

members and transverse battens with sucker cups on their underside.

Thus, two channel section longitudinal
 50 members may be provided, these being secured to spaced-apart transverse battens, preferably three, one at each end and one centrally. Instead of channel members one
 55 or both may have an upstanding flange, but channel members are preferred, of a channel width and spacing to accommodate all customary forms of stretcher.

The underside of each batten has a number of sucker cups, for example four, thereacross
 60 and equally spaced. The support can be placed into the body of a small van, such as a tradesman's van, if the body length is sufficient, of course, and the cups bear on the floor. It is found that if the floor is
 65 smooth these will adhere by suction, but even if such adherence is not obtained, the friction is sufficient to prevent movement of the support under normal conditions, including transport over rough ground.

Means are provided for securing a stretcher on the support. Thus, straps may be used to hold a stretcher by passing around its side
 70 runners or supports. A stretcher also could be secured by chained pins, snap locks or the like, and hinged eye plates, locks, channel recesses or the like may be provided to suit special stretchers and result in easy locking,
 75 e.g., for civil defence or Furlay stretchers. The support can be made as universal in its application to known forms of stretchers, so that after the support has been placed in
 80 position any available stretcher can be slid along the longitudinal members from the open rear doors and then secured.

The support can be used in army lorries and standard ambulances in emergency.

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